

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C.

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In the Matter of

Redevelopment of Spectrum to  
Encourage Innovation in the Use of  
New Telecommunications Technologies

) ET Docket No. 92-9  
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COMMENTS OF THE NYNEX CORPORATION

NYNEX Corporation ("NYNEX") submits the following in response to the Commission's First Report and Order and Third Notice of Proposed Rule Making in the above-referenced proceeding (the "Report").

I. INTRODUCTION

In the Report, the Commission seeks to redevelop 220 MHz of spectrum in the 1.85 to 2.20 GHz band for future telecommunications services that employ emerging technologies. NYNEX has long encouraged improvements in spectrum development and management so that spectrum can be used more efficiently to improve the telecommunications infrastructure. Allocating additional spectrum resources to the United States telecommunications industry will enhance its competitiveness and ensure all its users the benefits of new services.

The main concern in this proceeding is the migration of incumbent 2 GHz system operators to comparable alternative facilities in an equitable manner, while simultaneously

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protecting continuing point-to-point operations above 3 GHz. These microwave systems above 3 GHz provide for relatively high capacity routes that are essential for the provision of telephone services.

The length of the transition period to implement migration is important.<sup>1</sup> However, the commencement point of the transition period is equally important. NYNEX believes a more appropriate commencement date for the transition period would be the date when the emerging technology license is granted, rather than the effective date of the Report and Order on the Further Notice of Proposed Rulemaking.<sup>2</sup> If transition cannot be agreed to between parties, NYNEX suggests the parties submit the matter to arbitration.

NYNEX appreciates the cooperative effort undertaken by the commission staff and the National Telecommunications and Information Administration ("NTIA") to develop a process to accommodate certain point-to-point operations in the 2 GHz government band (1.71 to 1.85 GHz) that cannot relocate to a higher band.<sup>3</sup> Although such accommodation cannot provide for the wholesale retention of current operations in the 2 GHz band, it will provide a suitable alternative on a case-by-case basis.

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<sup>1</sup> NYNEX recommends a five year transition period. See, discussion p. 4 infra.

<sup>2</sup> See, Report, ¶ 24.

<sup>3</sup> See, Report, ¶¶ 32-36.

Finally, NYNEX recommends that the Commission utilize tax credits as a means of encouraging current fixed microwave licensees to migrate out of the 2 GHz band.

## II. ESTABLISHING A SPECIFIC SPECTRUM RESERVE FOR EMERGING TECHNOLOGIES SHOULD BE PART OF A COMPREHENSIVE SPECTRUM MANAGEMENT EFFORT

In order to further the aims of maximum efficiency in the development of spectrum telecommunications technologies and the management of the spectrum itself, the Commission should continue to work with the NTIA in an equally comprehensive review of spectrum that is presently reserved for federal government purposes which might be made available for commercial purposes. A coordinated effort that draws on the full resources of administrators of the spectrum and spectrum users will provide the best solution for emerging wireless services.

The Commission recognized the possible economic and operations considerations facing state and local governments in relocating 2 GHz microwave operations to higher frequencies. The private radio services using the 2 GHz band include local governments which may in turn include their use of the band for public safety purposes.<sup>4</sup> However, it does not necessarily follow that each use by local government is for public safety. Local government should be excluded from relocation to the extent such use is for public safety or other essential services. "Nonessential" uses should be subject to

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<sup>4</sup> See, Report, ¶ 26.

relocation. The Commission should require confirmation that state/local government's use is for public safety purposes or other essential services, as those terms are defined by the Commission.

### III. THE COMMISSION SHOULD ADOPT TRANSITION PERIODS OF FIVE YEARS

The migration of existing 2 GHz microwave users to alternative spectrum may be a long process, requiring complete re-engineering of existing paths, complete frequency coordination, negotiations of leases, securing environmental clearance and local zoning approval, not to mention construction of new facilities. Each one of these steps can be fraught with delays. Lease negotiations and zoning approvals can stall construction of new facilities for years at a time. In order to deal effectively with the host of possible and probable delays, NYNEX recommends a transition period of five years. With five year transition periods, the industry will be afforded more time to realize possible technological developments which might allow more efficient spectrum utilization, including more effective modulation schemes permitting greater spectrum capacity.

Five year transition periods will also allow for time to encourage voluntary transitions by allowing ample time to negotiate a transition agreement. The Commission must establish guidelines for negotiation. In the event parties are not able to negotiate an appropriate transition, the Commission should require parties to submit to private arbitration. The proposal for a negotiated rule making proceeding has the

potential to delay the provision of emerging technologies. Private arbitration will also prevent administrative and cost burdens on the Commission.

The Commission puts forth the possibility of longer transition periods for rural geographic areas versus a shorter transition period for urban areas. NYNEX supports a five year period for both urban and rural areas considering the unique characteristics of each of the respective areas. Frequency coordination in congested urban environments may be lengthy and complex. In heavily populated urban areas, real estate is at a premium, making the challenge of securing replacement sites, where necessary, great. Even in cases where the alternative facilities could comparably operate at the same location as their 2 GHz predecessor, leases for these sites would have to be renegotiated to accommodate the new facilities. In metropolitan areas, populated with skyscrapers, longer paths will be generally inappropriate. Shorter, multiple paths will be necessary, thereby multiplying the challenges of securing comparable facilities.

Rural areas, while not as spectrum-congested as urban areas, present their own obstacles in relocation from 2 GHz. These areas have historically been sensitive to environmental concerns as well as zoning obstacles. The benefits of a longer voluntary negotiation period in such cases would outweigh the possibility of an immediate provision of an emerging technology in these areas. In rural areas, transmitters and receivers tend to be spaced farther apart, favoring the utilization of lower frequencies. Due to the characteristics of lower

frequencies, they are less affected by such factors as fog and rain. As such, longer microwave hops can be utilized in these areas. In migrating these facilities to a higher frequency, shorter paths would be required to avoid signal degradation. Therefore, additional equipment and real estate would have to be obtained for these situations. Again, zoning proceedings and lease/purchase negotiations with land owners would present delays.

In addition, in all areas, but particularly in coastal areas, environmental factors can have dramatic effects upon the behavior of microwave beams. Adequate time for proper and thorough testing of alternative facilities in these situations would be required before determining that they were indeed comparable. Initial testing and an operational test period of one year should help ensure operational comparability under various climatic conditions and seasons.

The key to success in migrating 2 GHz incumbent licensees to higher bands is strict adherence to the coordination rules of the higher spectrum bands. Common carrier bands above 3 GHz provide facilities to transport dense cross sections of telephone traffic in the provision of service to the public. Therefore, the Commission must not waive any of the current practices governing the coordination of common carrier point-to-point microwave services. The proposed guidelines that will effect the migration of 2 GHz incumbents to the common carrier bands permit either voluntary negotiation of moves during the transition period and involuntary after expiration of the transition period. Because the party

migrating to a higher band is being compensated for this move, there is no need to disregard Part 21 coordination rules.<sup>5</sup> The proposed rules at 21.50(d) for common carrier operations and 94.59(d) must be maintained.

No matter what the Commission decides as the appropriate length of transition periods, such periods should not commence until an emerging technology license actually is granted, rather than the (yet undetermined) effective date of the Report and Order on the Further Notice of Proposed Rulemaking. This will provide a more definite starting point for negotiation between incumbents and (yet undetermined) license holders.

#### IV. COMPARABILITY THRESHOLDS MUST BE HIGH AND STRINGENTLY MAINTAINED

The report solicits comment on how to define comparable alternative facilities.<sup>6</sup> Alternative facilities must be comparable to the current 2 GHz point-to-point facility based on calculated path reliability measured in minutes of outage per year; capacity afforded by the alternative facility; and quality, i.e., signal/noise ratio for analog systems and bit error rate for digital systems. In addition, when a 2 GHz microwave system is migrated, the alternative facilities must have at least the same number of dedicated radios and paths and a comparable depth of spares as maintained by the incumbent for the 2 GHz system.

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<sup>5</sup> 47 C.F.R. 21.100(d).

<sup>6</sup> Report, ¶ 25.

The incumbent must be able to choose the vendor providing the alternative facilities. The migrated system operator will rely on this vendor in the future for various technical services and a multiplicity of vendors would place an administrative, operational and potential economic burden upon the relocated incumbent.

V. THE COMMISSION HAS THE AUTHORITY TO ISSUE TAX CERTIFICATES AS A MEANS OF ENCOURAGING CURRENT FIXED MICROWAVE LICENSEES TO MIGRATE

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Section 1071 of the Internal Revenue Code (I.R.C.) provides that "[i]f the sale or exchange of property...is certified by the Commission to be necessary or appropriate to effectuate a change in a policy of, or the adoption of a new policy by, the Commission with respect to the ownership and control of radio broadcasting stations, such sale or exchange shall, if the taxpayer so elects, be treated as an involuntary conversion of such property within the meaning of [I.R.C.] section 1033." When the Commission issues such a certificate, the taxpayer will not recognize gain on the sale or exchange, provided that any money received by the taxpayer is either (i) converted into property similar or related in service or use or (ii) the taxpayer correspondingly reduces its basis in its remaining depreciable property. The gain on the sale or exchange is not permanently avoided, but is merely deferred until a later recognition event occurs.

The Commission has previously interpreted its authority under section 1071 to apply to exchange of nonwireline cellular properties. Specifically, in Telocator



Network of America,<sup>7</sup> the Commission granted tax certificates in connection with the sale or exchange of nonwireline cellular partnership interests in cellular markets 31 through 90. The Commission should again issue tax certificates as a means of encouraging current fixed microwave licensees to migrate from the 2 GHz band.

#### VI. CONCLUSION

The redevelopment of spectrum in the 2 GHz band, combined with continued improvements in spectrum management, will be a boon to the United States telecommunications industry and its consumers. However, the success of emerging telecommunications technologies cannot be measured by their introduction and consumer acceptance alone. Care must be taken

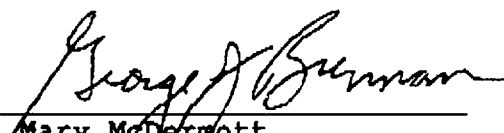
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<sup>7</sup> 58 RR 2d 1443 (1985).

to adequately provide for the relocation of incumbent 2 GHz microwave users in a manner which simultaneously protects current operations above 3 GHz, if this proceeding and resultant spectrum redevelopment are to be regarded as wholly successful.

Respectfully submitted,

NYNEX Corporation

By:   
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Mary McDermott  
George J. Brennan

120 Bloomingdale Road  
White Plains, NY 10605  
914-644-5234

Their Attorneys

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